Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 01-Apr-2020 | Report No: PIDC28286

Public Disclosure Authorized

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Dominican Republic	P171778		Dominican Republic Wastewater Improvement and Water Loss Reduction Project (P171778)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
LATIN AMERICA AND CARIBBEAN	May 29, 2020	Dec 11, 2020	Water
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Dominican Republic,Ministry of Finance	Water and Sewerage Corporation of Moca (CORAAMOCA), National Institute for Water Supply and Sewerage	

Proposed Development Objective(s)

To increase the efficiency, access and quality of water supply and sanitation services in target areas of the Dominican Republic.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	43.50
Total Financing	43.50
of which IBRD/IDA	43.50
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	43.50

Environmental and Social Risk Classification	Concept Review Decision
Substantial	Track I-The review did authorize the preparation to continue

B. Introduction and Context

Country Context

1. **The Dominican Republic has achieved one of the most rapid growth rates in Latin America and the Caribbean (LAC) region over the past 25 years.** Economic growth averaged 5.3 percent from 1993 to 2018. Fueled by domestic demand, the country's economic growth rate further accelerated to an average of 6.3 percent per year between 2014 and 2018 – and 7 percent in 2018, rendering it the fastest-growing economy of the LAC region during this five-year period. This dynamic growth has enabled a convergence of the Dominican Republic's Gross National Income (GNI) per capita (US$6,259 in 2015 and US$6,574 in 2016) with that of the region.

2. **Poverty has likewise declined substantially over the past few years.** Poverty headcount ratio at national poverty line steadily declined from 49.7 in 2005 to 30.5 percent in 2018 (World Development Indicator, World Bank), while poverty at US$3.2 per person per day (in PPP 2011) fell from 16.4 percent to 5.9 percent during the same period. Growth over the last decade has been slightly pro-poor as evidenced in the fact that those living in the bottom 40 percent of the income distribution have experienced an average annual per capita increase of 4.2 percent compared to 3.8 percent for those in the top 60 percent. The Gini coefficient decreased by 2 points from 49.6 in 2008 to 47.1 in 2016. Access to basic services such as education, water, and sanitation has consistently improved since the early 2000s reducing deprivations.[1]

3. **While the country has progressed in achieving high levels of basic access to infrastructure such as water supply and sanitation, it now faces the challenge of transitioning from supplying infrastructure to providing quality services**. Basic coverage statistics mask the poor quality of services, which likely contributes to the Dominican Republic's underperformance with respect to its human capital index (HCI) score. The Dominican Republic has a low level of HCI (0.49) as compared to its peers with similar GDP per capita such as Serbia (0.72), Albania (0.62), and Costa Rica (0.62). It is, likewise, the wealthiest within the cohort of countries that have the same HCI. This cohort includes countries such as Nepal and Cambodia, which are much poorer in terms of GDP per capita. The poor quality of water and sanitation services carries economic and social costs, which can be exacerbated by climate shocks and natural disasters.

Sectoral and Institutional Context

4. **The Dominican Republic's high levels of access to basic water supply and sanitation (WSS) - 97 and 95 percent, respectively (as of 2017), mask the low quality of services provided**.[2] Of the 80 percent of Dominicans that live in urban centers, only 27 percent of this population has access to centralized sewerage services, while 70 percent rely on onsite systems.[3] With the rapid population growth, sewerage coverage is expected to drop to 15 percent by 2030 in no further expansion takes place. Only 10 percent of wastewater is treated, treatment of fecal sludge from on-site septic tanks is essentially non-existent, and onsite systems contribute to groundwater contamination in densely populated areas. In

[1] Dominican Republic Systematic Country Diagnostic. World Bank 2018.
[2] WHO/UNICEF Joint Monitoring Programme (2019). Dominican Republic Data File. < https://washdata.org/data/household#!/>
[3] 60 percent of the urban population relies onsite flush systems such as septic tanks and 10 percent on latrines. Both types of facilities contribute to groundwater contamination in densely populated areas.

2012, it was estimated that only 40 percent of the drinking water systems operated by public providers treated water with chlorine.[4]

5. **WSS service providers do not report on performance indicators, and the scant available information shows high rates of discontinuity, high levels of non-revenue water (60-80 percent), and low levels of metering (20 percent)**.[5] On average, the Dominican Republic's WSS operators collectively produce 600 liters/person/day, which is more than sufficient to meet basic water needs.[6] Nevertheless, intermittent water supply resulting from inefficiencies in service delivery is the norm country-wide, where continuity ranges from 1.5 to 24 hours per day.[7] These inefficiencies not only impact services, which have economic and social costs, but also make the WSS operators in the Dominican Republic less resilient and more vulnerable to climate shocks. For example, excessive physical and commercial water losses translate into less water being available for consumption, which exacerbates drought conditions faced by users and operators. Moreover, lost revenues that are needed for adequate operation and preventive maintenance increases the risks of systems falling out of service during natural disasters or being able to get systems back on line after an event occurs. In addition, the lack wastewater management puts populations at high risk of communicable disease during flooding events.

6. **The sector governance framework that was developed in the 1960s has not kept pace with the evolving needs in the sector and contributes to the performance of providers.** In 1962, the National Drinking Water and Sewerage Institute (INAPA for its acronym in Spanish - *Instituto Nacional de Agua Potable y Alcantarillado*) was created to serve as the national WSS service provider. However, over time political interests resulted in the creation of autonomous provincial level water utilities. Since the 1970s, seven state-owned enterprises have been created to provide WSS services, serving about half of the country's 10.7 million population leaving INAPA to serve the other half.[8] Four of these six state-owned provincial WSS corporations (CORAAs for its acronym in Spanish – *Corporaciones de Agua y Saneamiento*) are smaller and have less institutional capacity. These utilities have taken over WSS assets from INAPA along with the operation of the systems. However, these smaller providers never developed the capacity to make new infrastructure investments, as evidenced in low capital investment spending levels. In addition, currently there is no central line agency that supports these CORAAs with technical assistance, planning, budgeting, and economic and service standards regulation, which further hampers their ability to deliver quality services. A new WSS law was submitted to the executive branch in 2019 to address the institutional gaps at the central level, which if passed by Congress and implemented should help modernize the WSS sector. The time table for approval is a political and legislative process.

7. **Passing sector reforms will help clarify roles and responsibilities at the national level, but progress on improving the efficiency and effectiveness of the CORAAs should be possible within the existing institutional arrangements.** While the existing corporate institutional architecture of the CORAAs will not change with the new WSS Law, the goal is that they will receive better guidance and technical assistance from the central government under the proposed law and potentially improved incentives with an independent regulator. By working with the smaller CORAAs, until the WSS law is passed, the World Bank can help establish a model under this operation for how it can help to strengthen the smaller providers by building on its sector experience, past and ongoing analytical work (i.e. Public Expenditure Review), and a proposed Development Policy Financing on Blue Economy operation under preparation. In combination, these efforts

[4] Proposal of a National Sanitation Strategy. 2016. National Institute of Water and Sewerage.
[5] Ibid3
[6] World Health Organization considers 100 liters per capita per day or more to be an optimal level to reduce health risks.
[7] CORAAPLATA, CORAAMOCA, and CORAAROM respectively report average continuity levels of 1.5, 14, and 8 hours per day.<IBNET/Domincan Republic> These services are often rationed with specific sectors scheduled to receive on specific days of the week. Resulting in households investing in storage tanks and cisterns.
[8] INAPA was created in 1962, and during the 70s began decentralizing services through autonomous corporations. The CAASD was created in 1973, CORAASAN in 1977, CORAAMOCA in 1997, CORAAPPLATA in 1997, and CORAAROM in 1998.

would lay the ground work for the formulation of a future comprehensive WSS Reform Program to support the implementation of the envisioned sector wide reforms and make improvements in efficiency and effectiveness across multiple providers, which the World Bank and other development partners could support through the use of an array of instruments. While this Project will focus on CORAAMOCA, responsible for WSS services in the Province of La Espaillat, it would further strengthen multi-level dialogue through capacity building interventions at the provincial and national levels and would promote harmonized support for future reforms.

Relationship to CPF

8. **The proposed Project is fully aligned with Results Area 2 (Improving access to infrastructure) and Results Area 3 (Supporting the Government to build resilience to external shocks) of the World Bank Group's Country Partnership Strategy (CPS) dated September 25, 2014, and the Performance and Learning Review dated January 11, 2018.** The Project will support improving access to infrastructure by expanding access to wastewater collection and treatment and improving the service quality of water supply. The Project will also strengthen infrastructure and institutional resilience to extreme climatic shocks through investments in water supply, improved wastewater collection and treatment, improved planning and problem-solving. The Project is also addressing a key priority identified in the 2018 Systematic Country Diagnostic ("Improving the efficiency of water and sanitation provision to increase resilience, improve service quality, and reduce degradation of water resources", 2018 SCD, page 10) which is expected to be considered under the new Country Partnership Framework.

C. Proposed Development Objective(s)

9. The Project Development Objective (PDO) is to increase the efficiency, access and quality of water supply and sanitation services in target areas of the Dominican Republic.[9]

10. The Project's focus will be localized with an emphasis on the CORAA that is responsible for the Province of La Espaillat, but the Project will also allow to identify larger reform opportunities for a future sector wide operation.

Key Results (From PCN)

11. The results of the proposed Project will be measured through the following indicators:

- Reduction in non-revenue water ***(****measure of* ***operational*** *efficiency****)***
- Improved working ratio (measure of improved ***financial*** efficiency)
- Number of people receiving water supply X hours a day and/or % of drinking water samples meeting national water quality standards ***(****measure of the* ***quality of water supply services)***
- Number of people gaining access to sewerage and Number of people gaining access to improved wastewater treatment
- Volume of wastewater treated to national standards

[9] The Project does not aim to substantially increase new access to water supply as access coverage is quite high; therefore there are no PDO indicators for access related to water supply rather only to quality of services. Increasing access will be focused on sewerage.

D. Concept Description

12. The Project intends, through its investments in infrastructure and technical assistance, to: (i) improve the efficiency and quality of water supply and sanitation services including wastewater treatment in the municipalities of Moca and Gaspar Hernandez. This includes expanding access to sewerage in these localities; (ii) have a local impact on the institutional capacity of CORAAMOCA to improve efficiency and quality of services and increase the resilience of the utility, and (iii) identify reform opportunities at the national level to improve the sector's efficiency for future operations.

13. Three components envisaged under the Project include: (i) Infrastructure investments to improve water and sanitation infrastructure and efficiency; (ii) technical assistance to (a) improve CORAAMOCA's efficiency, effectiveness, resilience, and ability to engage consumers and problem-solve, (b) identify national level support for sector reform opportunities; and (iii) program management. The total project amount is US$43.5 million.

14. The number of beneficiaries will need to be confirmed, but preliminary estimates include 118,000 people gaining access to improved wastewater treatment with a subset gaining access to rehabilitated or new sewerage in Moca and Gaspar Hernandez, and approximately 95,000 people having improved quality of water supply services in various municipalities of Espaillat.[10]

Component 1: Water Supply, Sewerage and Wastewater Treatment Infrastructure and Rehabilitation (US$38.0 million)

15. The objective of this component is to improve water treatment, wastewater collection and treatment, and quality and efficiency of services in CORAAMOCA's service area. This component will include the construction of two new wastewater treatment facilities for the municipalities of Moca and Gaspar Hernandez, along with the rehabilitation and expansion of wastewater collectors, and installation of household sewerage connections in specific areas. Final technologies and site selection will be informed by feasibility studies. Investments in water treatment and distribution include minor upgrading of the La Dura water treatment plant, macro- and micro-metering, and possible the rehabilitation of water distribution networks in these municipalities and others to be defined in CORAAMOCA's service area.

Component 2: Institutional Capacity Building (US$ 2.75 million)

16. Beyond infrastructure investments, the Project will finance technical assistance and capacity building to support CORAAMOCA with its technical challenges. Interventions may include but are not limited to water and energy audits, a strategy and investment plan to reduce non-revenue water, updated user and network cadasters, a master investment plan for its service areas, and training on operation and maintenance of wastewater treatment plants among others. These are some basic building blocks that address technical challenges for a water utility to be more efficient.[11] The Project will also support CORAAMOCA with improving problem-solving, addressing gender gaps, and citizen engagement.

17. The Project may also support consultancies for preparatory work related to the anticipated legal framework reforms (e.g. regulatory aspects, studies for institutional arrangements of central government functions, etc); and for

[10] Wastewater improvement will include new sewerage systems in Gaspar Hernandez which is approximately 15,000 people, and rehabilitation of existing collectors in Moca, but also expansion of the network benefiting a total 103,000.

[11] Soppe, Gerard, Nils Janson, and Scarlett Piantini. 2018. "Water Utility Turnaround Framework: A Guide for Improving Performance." World Bank, Washington, DC

supporting the design of incentive mechanisms to improve efficiency, quality of services and accountability that could be employed under a future WSS Reform Program with a national focus.

Component 3: Project Management and Monitoring (US$2.75 million)

18. This component will provide support for project management, monitoring and evaluation. Given CORAAMOCA's institutional challenges and lack of experience working with the World Bank or other finance organizations, the Project will need a Project Implementation Unit (PIU) housed in another organization that can manage and ensure compliance with World Bank fiduciary and environmental/social standards along with monitoring and evaluation. The government has identified INAPA as implementing agency to support CORAAMOCA.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

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